



# ILL newsletter

MAY 2020

Consult our [web site](#) and follow us on [Twitter](#) !

## GENERAL NEWS



### Activities gradually resume on the ILL site

Staff are progressively coming back to work on site – about 150 people this week – to work on specific projects, like the second protein crystallography station, DALI, the installation of the H4 beam tube and key reactor maintenance, which must be completed this year, as well as prepare for the next reactor cycle. Most staff however are still working from home.

The next reactor cycle will start on 11 August and will be scheduled assuming that users cannot come to ILL. Experiments from the last two proposal rounds, for which samples can be sent and handled by ILL staff, will be given priority.

New software tools for remote instrument control and data treatment will be trialled during this cycle.

We will monitor the situation with respect to users being able to come to ILL for these experiments, which will depend mainly on travel conditions in Europe and the number of people that can be hosted on site.

### Next reactor cycles:

**11 August until 28 September (49 days)**

Three more cycles in 2021 before the long shutdown

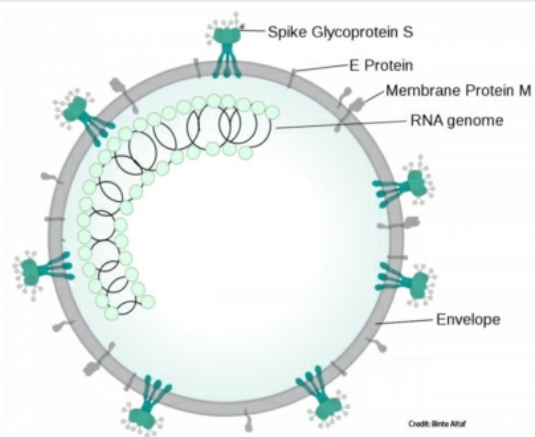
### Autumn 2020 proposal round:

Proposal deadline: 15 September 2020 (midnight central European time)

Subcommittee meetings: 3-4 November 2020

Scientific Council: 5-6 November 2020

Accepted proposals will be scheduled in the Spring 2021.



### ILL response to the challenges posed by Covid-19

At the ILL, the next cycle will constitute a significant opportunity to perform early research related to Covid-19 on many of our neutron scattering instruments. The deuteration facilities and shared biology and soft matter facilities on the the EPN campus contribute to this unique research opportunity. ILL scientists working in the field of biology are already applying their expertise in the quest to understand Covid-19, building on [their previous insightful discoveries](#).

For rapid access to beam time, Director's Discretionary Time (for full experiments) and Easy Access (for short measurements) should be used.

[Read more](#)



### InnovaXN programme for PhD projects

The InnovaXN project supports 40 fully-funded PhD studentships at ESRF and ILL working on pre-competitive research projects, each involving an industrial partner.

A first set of 20 projects was selected in 2019, about 1200 applications were received from students and the final phase of recruitment is in full swing with a view to starting work in September 2020.

In the 2nd – and last – call, ILL has received 30 pre-projects, about half of which will be selected for submission of full projects and final selection in July.

See the InnovaXN [web site](#) for more details.

## HIGHLIGHTS AND SCIENCE NEWS



### Magnetic octupoles form a new quantum ice

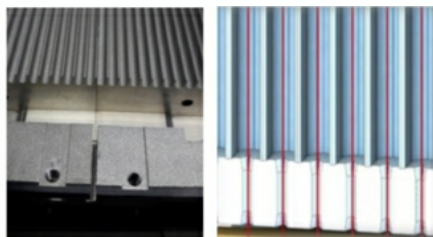
Recent work identifies Ce<sub>2</sub>Sn<sub>2</sub>O<sub>7</sub> as a unique example of frustrated multipoles forming a



'hidden' topological order, thus generalizing observations on quantum spin liquids to multipolar phases that can support novel types of emergent fields and excitations.

The publication made the front cover of Nature Physics in May 2020.

[Read more](#)



#### A new detector for D20

A critical but aging component of the high-intensity, two-axis diffractometer, D20, is its large "banana" detector. Good news and a great achievement - the new trench-MWPC detector is now available. Its name reflects its geometry of anode wires inserted into cathode trenches. As the electrostatic force applied on the anode wires is less than in standard MWPCs, there is a gain in stability resulting in more uniform detector response, even when long wires are used. The local counting rate measured with the first prototype is at least 5 times higher than with an equivalent MWPC.

[Read more](#)

[MORE HIGHLIGHTS HERE](#)

[A SELECTION OF RECENT ILL PUBLICATIONS](#)

[Previous issues of the ILL newsletter](#)

Consult our [web site](#) and follow us on [Twitter](#) !



[www.ill.eu](http://www.ill.eu)  
[communication@ill.eu](mailto:communication@ill.eu)  
To unsubscribe follow instructions [here](#).